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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/693,084	10/19/2000	Kenneth B. Trauner	P1-15	7795

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EXAMINER

CROSS, LATOYA I

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/693,084

Applicant(s)

TRAUNER ET AL.

Examiner

LaToya I. Cross

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-13,15,17-34,36,38,40 and 41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 34,36,38,40 and 41 is/are allowed.
- 6) ☒ Claim(s) 1,3-13,15 and 17-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This Office Action is in response to Applicants remarks filed on 4-26-04. Claims 1, 3-13, 15, 17-34, 36, 38, 40, 41 are pending.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 3-5, 8-13, 15, 17-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,062,126 to Johnson et al in view of US Patent 5,614,718 to Brace.

Johnson et al teach a beverage quality control apparatus. The apparatus includes a sensor configured to be in thermal communication with the beverage and to detect attainment of a predetermined temperature. The apparatus also includes an indicator coupled to a timer, configured to indicate to the user the status of the timer and thus, the quality of the beverage. See abstract. The quality control apparatus is designed to fit within a beverage container (col. 2, lines 54-65. The sensor is in thermal communication with the beverage in the container, such that heat energy from the beverage is transferred directly or indirectly to the sensor. Alternatively, the sensor may be situated within the container, itself (col. 3, lines 16-23). The indicator may include a visual display, such as an LCD display (col. 3, lines 3-4). The sensor may be coupled to a controller suitable to link the sensor, timer and indicator. The sensor may also be covered by a protective covering (col. 3, lines 23-28).

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At col. 2, lines 61-65, Johnson et al teach that the quality control apparatus may be used on any container holding any beverage. However, Johnson et al fail to teach determining the quality of the beverage by measuring the absorption properties.

Brace teaches evaluating the quality of beverages, where the chemical constituents of the beverage are determined using the spectrum data. Specifically, the beverage container is subjected to spectral analysis using NIR transmission to acquire information in the form of spectral signatures, which are analyzed for qualitative features that allow accurate classification of the material in the container. At col. 4, lines 25-31, Brace teaches that the information provided through the spectroscopic analysis is indicative of absorption bands in the near infrared and allows quantifying the concentration or pressure of specific gases within the analysis container, which includes measurement of the head space gas concentrations to determine carbonation loss rate.

It would have been obvious to one of ordinary skill in the art to measure the quality of a beverage, including wine, with the apparatus of Johnson et al by measuring the absorption properties of the beverage to determine the quality. Where the quality control apparatus is incorporated into the beverage container itself, as suggested by Johnson et al and Brace, the user will be able to determine the quality of the beverage without opening the bottle. The absorption spectrum of the wine is advantageous in that it will allow the user to determine properties such as sugar and alcohol content.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious, within the meaning of 35 USC 103 in view of the teachings of Johnson et al and Brace.

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3. Claims 6, 7, 24, 32, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al and Brace as applied to claims 1, 3-5, 8-13, 15, 17-31 above, and further in view of US Patent 5,969,606 to Reber et al.

The disclosures of Johnson et al and Brace are described above. Neither reference teaches sensing data selected from alcohol, sugar, pH, etc. as recited in claim 7, 33 and 35. Further, neither reference teaches a microprocessor or an external computer.

Reber et al teach a sensor that senses a condition of a food item within a container. The food item may be a liquid food item such as fruit juices, milk, etc. The sensor is one that senses humidity, temperature, food quality, or acidity (pH). A signal is communicated from the sensor to an electronic tag and in turn to an indicator. The indicator provides either an audible or visual indication of the condition of the food item. See col. 3, line 32 – col. 4, line 4. A processor, which may be in the form of a microprocessor, is used to communication information between the sensor and the electronic tag (col. 6, lines 1-9). A receiver and transmitter are coupled to the processor to transmit information regarding the condition of the food for external readings (col. 6, lines 16-20).

It would have been obvious to one of ordinary skill in the art to include a sensor capable of sensing pH into the device of Johnson et al to allow the user to determine the acidity of the beverage and in turn determine the quality of the beverage. Further, it would have been obvious to one of ordinary skill in the art to use a microprocessor to transform information into a form comprehensible by the user and further download the information into an external computer for storing the result for later use.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious, within the meaning of 35 USC 103, in view of the teachings of Johnson et al and Brace and further in view of Reber et al.

Allowable Subject Matter

4. Claims 34, 36, 38, 40 and 41 are allowed. The prior art of record fails to teach or suggest a method for determining the wine quality wherein absorption spectrum data, indicative of the quality, is obtained by contacting the wine or wine vapor in a sealed container with a sensor and measuring and quantifying the data obtained.

Response to Arguments

5. Applicant's arguments filed 04-26-04 have been fully considered but they are not persuasive. Applicants' primary argument is that neither reference teaches determine the qualities of wine. In response, the Examiner considers the argument to be persuasive for the method claims (34, 36, 38, 40, 41). With respect to the device claims (sensor claims) the Examiner has not interpreted Applicants' claims to be limited to a sensor for determining wine quality. The art applied by the Examiner is used to determine the qualities of beverages such as coffee and those beverages having alcohol and sugar contents that affect their quality. The sensors disclosed in the art cited are suitable for use in determining the quality of wine, although not specifically disclosed, because they are used to determine things such as sugar and alcohol content, which are also present in wine and affect wine's quality.

Applicants also argue that to incorporate the means for measuring absorption spectrum of Brace into the apparatus of Johnson et al would result in a device capable of

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measuring temperature and also having means for measuring absorption spectrum.

Applicants assert that this is not the present invention. The Examiner disagrees. The present invention's open language does not exclude a temperature sensing means.

Further, the device of Brace teaches that the absorption spectrum measuring means is incorporated into the beverage bottle as well (figures 3 and 8).

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaToya I. Cross whose telephone number is 571-272-1256. The examiner can normally be reached on Monday-Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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